

# RATING PRESENTATION

## MASTER RESOLUTION WATER REVENUE & REFUNDING BONDS SERIES 2016 A&B BONDS



*April 15, 2016*



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# Participants and Key Advisors

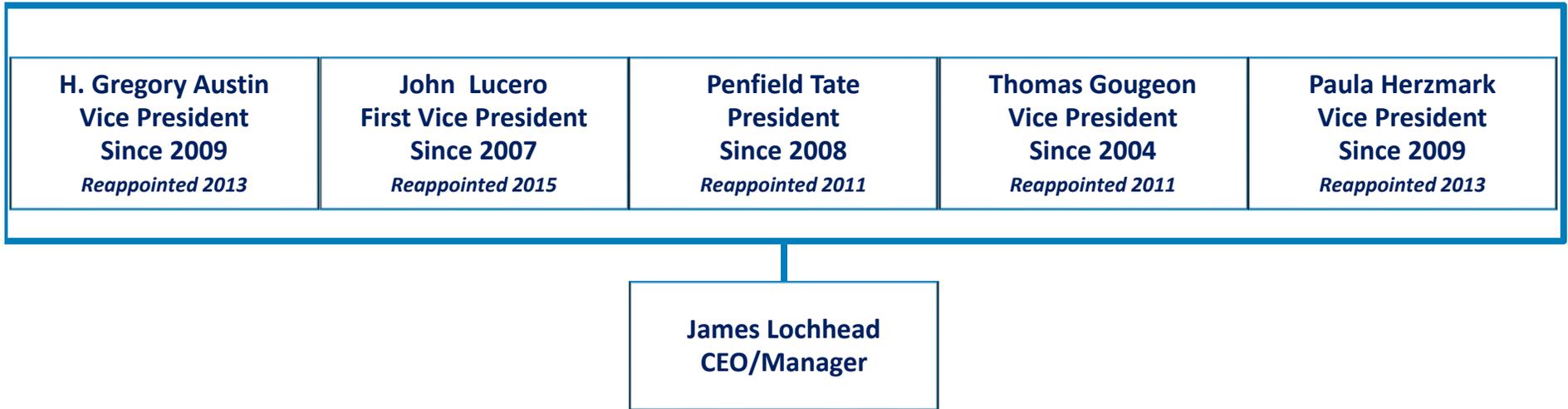
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# SECTION 1: GOVERNANCE & MANAGEMENT STRUCTURE

# Independent and autonomous governance structure

- Legal establishment: The Board, commonly known as Denver Water, was established in 1918 by the people of the City as an independent, autonomous and non-political agency
- Autonomous from the City: Water Works Fund has no transfer to and from the City's general fund
- Enterprise status: Denver Water's Enterprise status permits issuance of revenue bonds without voter approval
- Rate setting authority: the Board has full authority to set rates including an ability to recover additional amount from outside city customers

# Board of Directors

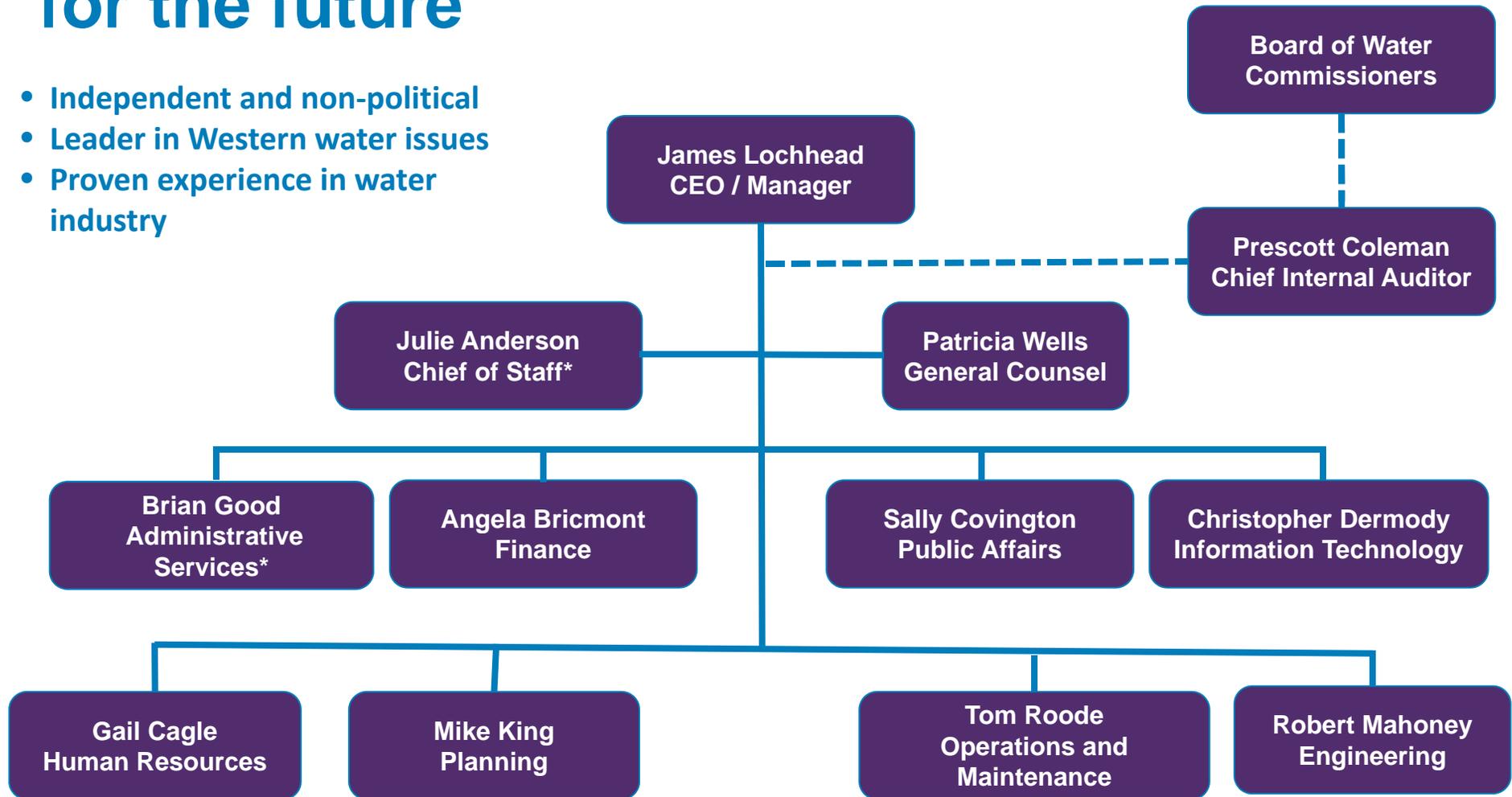


## The Board:

- Appointed by Mayor, City of Denver, for a six-year overlapping terms
- Meets twice a month
- Independent

# A management team focused on planning for the future

- Independent and non-political
- Leader in Western water issues
- Proven experience in water industry



*\*Organizational change announced 04/13/2016*

# Strategic focus for 2016 and beyond

- **Operations Complex Redevelopment**
  - Renovate and replace existing buildings at Denver Water’s main complex to improve safety and security, reduce overall space requirements and increase efficiencies
- **Sustainability**
  - Development of an Environmental Management System, beginning with water treatment plants and the water quality laboratory
  - Hire a dedicated sustainability manager and draft Denver Water’s first sustainability plan
- **New Integrated Resource Plan (IRP)**
  - Initiate a new IRP that expands on the prior IRP by a) fully integrating the planning of our entire system with all stakeholders, b) driving capital spending, and c) embracing a vision for urban water efficiency, including drinking water, wastewater and storm water

# Strategic focus for 2016 and beyond

- **Achieve full alignment of budget development and execution with strategic priorities and True North Metrics**
  - Implement changes to budget and financial systems to simplify and streamline the financial data structure
  - Conduct a strategy review of Information Technology
  - Implement new rate structure with an increased fixed-rate component
- **Customer Satisfaction**
  - A dedicated effort over the past four years has resulted in an 8% increase in top-box customer satisfaction scores.
  - 2% additional improvement targeted by 2017
- **Safety**
  - Goal is to cut lost workday incidents in half and reduce total injuries by 25% in 2016
- **Employer of the Future**
  - Overall goal of repositioning Denver Water as an employer of choice, able to retain and attract top talent through a competitive total rewards package, career development, training, diversity, and workforce planning programs

# Leader in regional cooperative initiatives

- **Colorado River System Conservation Pilot Program**
  - Denver Water partnered with several other entities in signing a landmark water conservation agreement
- **Colorado River Cooperative Agreement (CRCA)**
  - Provides greater certainty on continued use of Western Slope water
  - Eliminates a longstanding risk of water court litigation for Blue River water use
- **Water Infrastructure Supply Efficiency (WISE)**
  - Brings together several utilities in Denver metropolitan area by using excess capacity (Aurora) and excess water (Denver Water) on interruptible basis to provide water to South Metro Denver entities currently relying on non-renewable water source
- **Arvada Intergovernmental Agreement**
  - Arvada shares 1/6 of the capital cost related to Gross Reservoir expansion and pays raw water capacity charge for a maximum of three thousand acre feet annually



*Gross Reservoir*

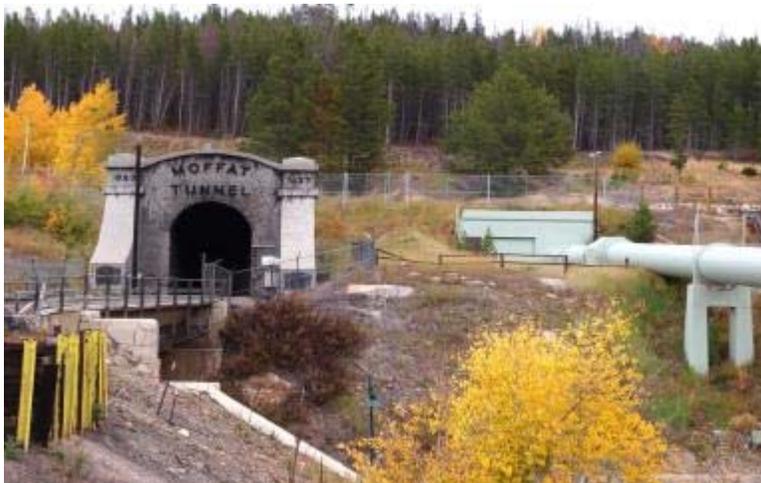
## SECTION 2: SYSTEM INFORMATION

# Robust system

- Geographically diverse
- Broad portfolio
- Gravity based system
- Net energy producer
- Adequate redundancies
- Third largest land owner in Colorado



Dillon Reservoir



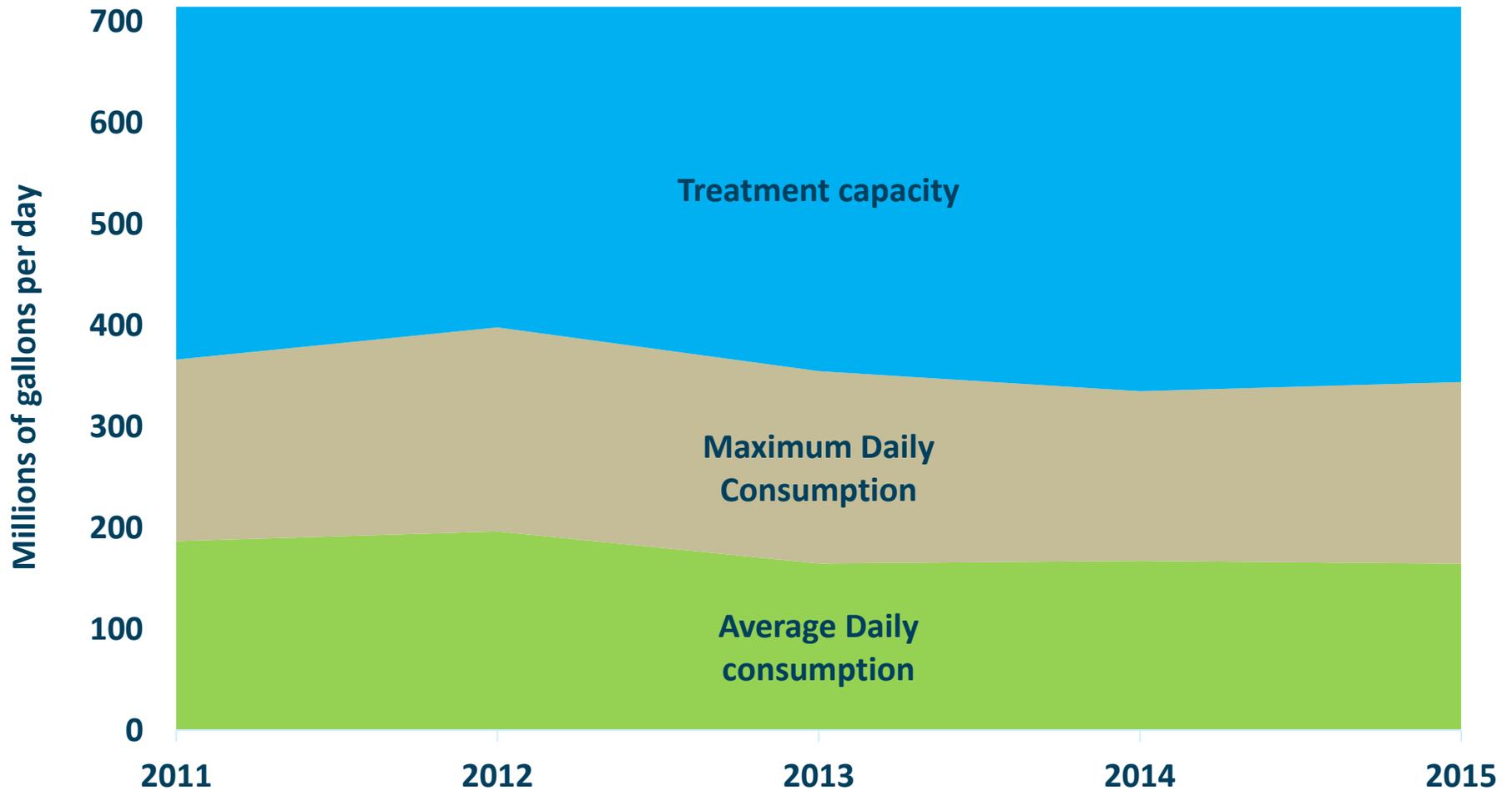
Moffat Tunnel



Hillcrest tanks and pump station



# Adequate treatment capacity for growth



# Ensuring resilience to weather variability

- Drought Response Plan (the “DRP”) establishes a progressive response to worsening drought conditions, aimed at increasing water supplies and reducing water use
- It outlines specific operational and financial measures to be taken to address any possible decrease in revenues corresponding with the severity and potential duration of drought
- Additionally, Denver Water maintains a strategic water reserve of 200,000 acre-feet to help reduce the impacts of severe drought and other potential water supply problems

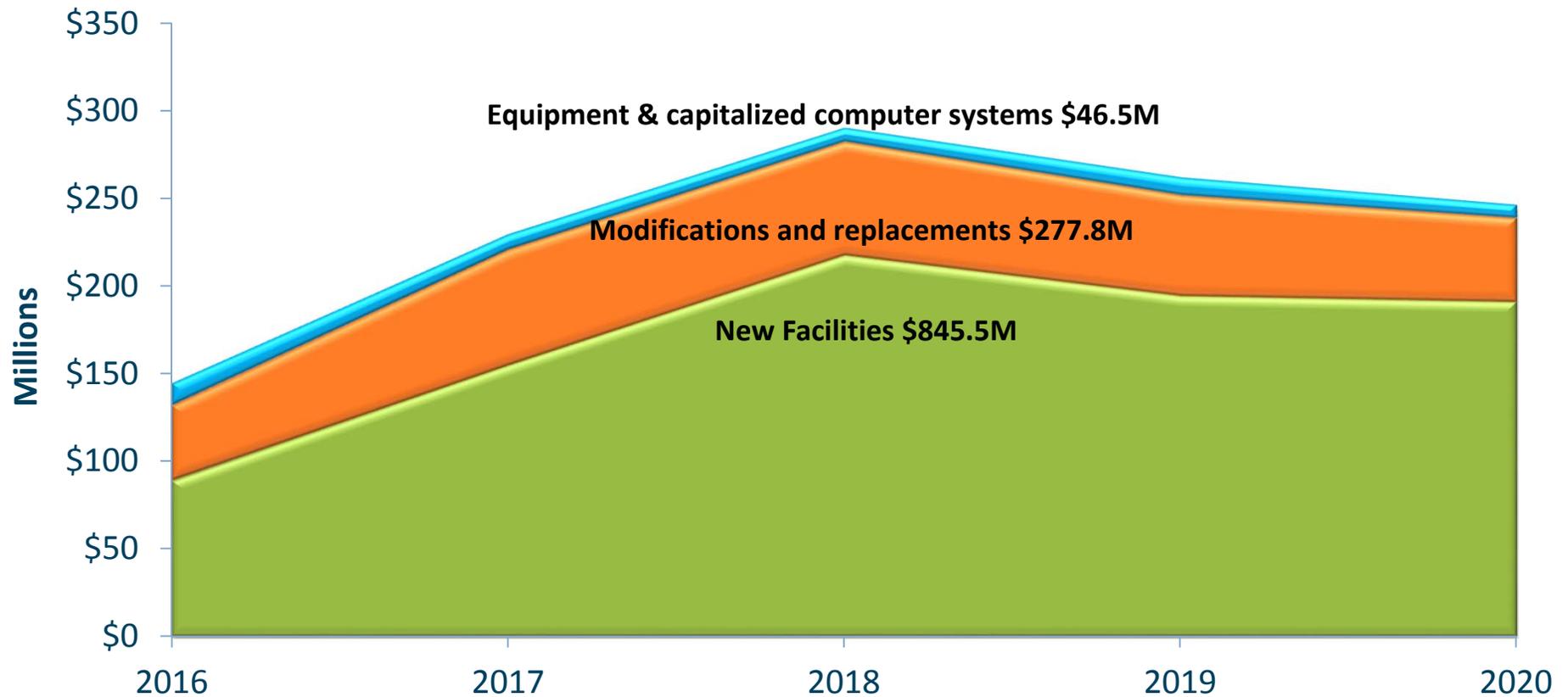
# SECTION 3: LONG-RANGE PLANNING

# Major capital projects over next five years

- Moffat Water Treatment Plant - \$197.3 million
- Operations Complex Redevelopment Project - \$179.0 million
- Replacement of Hillcrest Tanks and Pump Station - \$87.7 million
- Conduit 16 Replacement Project - \$74.7 million
- Gross Reservoir Expansion Project - \$93.0 million

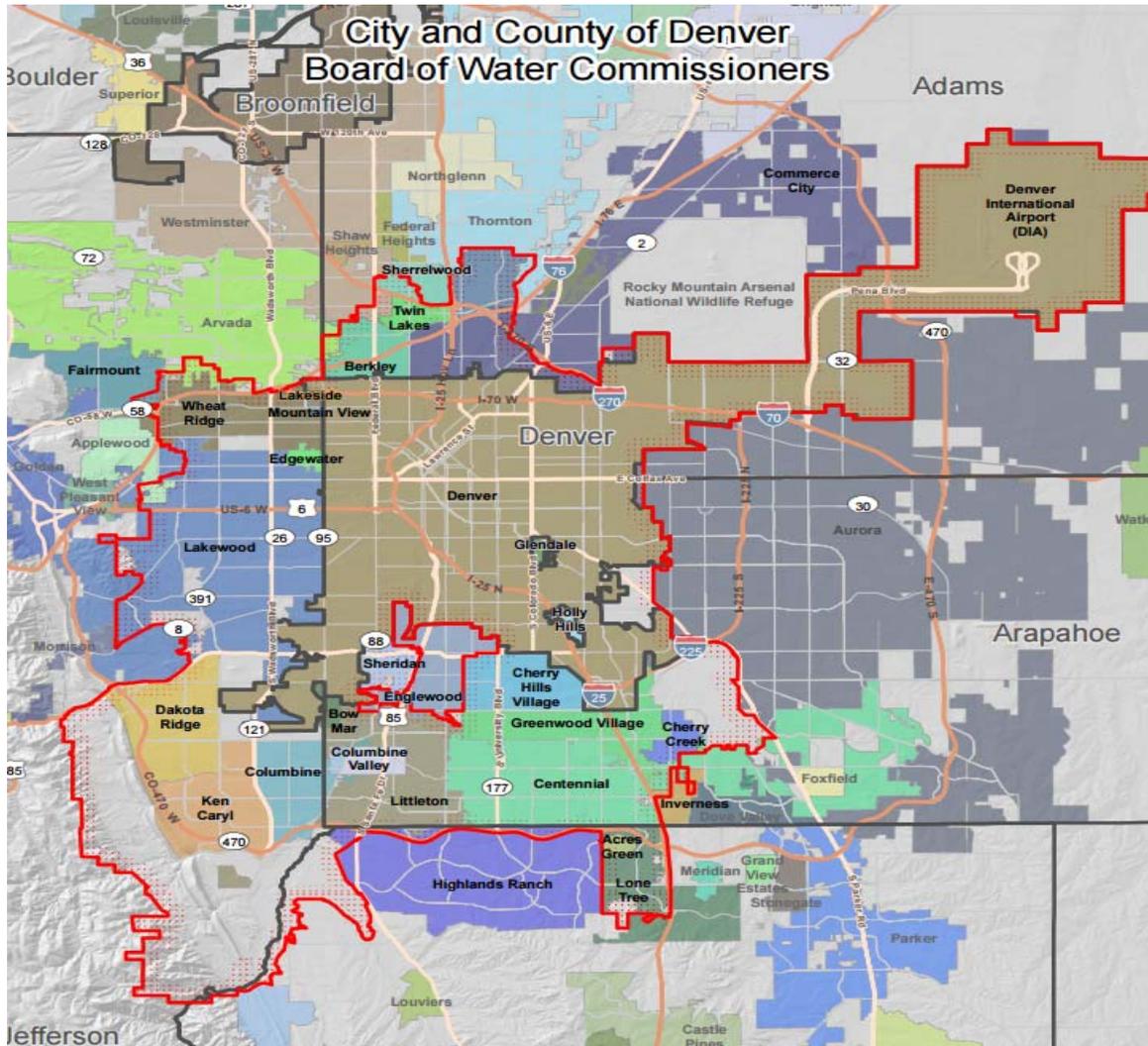
# Strong financial capacity to fund expansion and system reinvestment

*Proposed 5 Year Capital Improvement Program totals \$1,169.8 million, including \$845.5 million in expansion capital of which 70% is expected to be financed by debt*



# SECTION 4: SERVICE AREA ECONOMICS & DEMOGRAPHICS

# Large and diverse service territory



*Defined service area with strong economic base, low unemployment, growing population, robust housing market, and expanding mass transit and airport*

*Roughly 1 in 4 Coloradans is served by Denver Water*

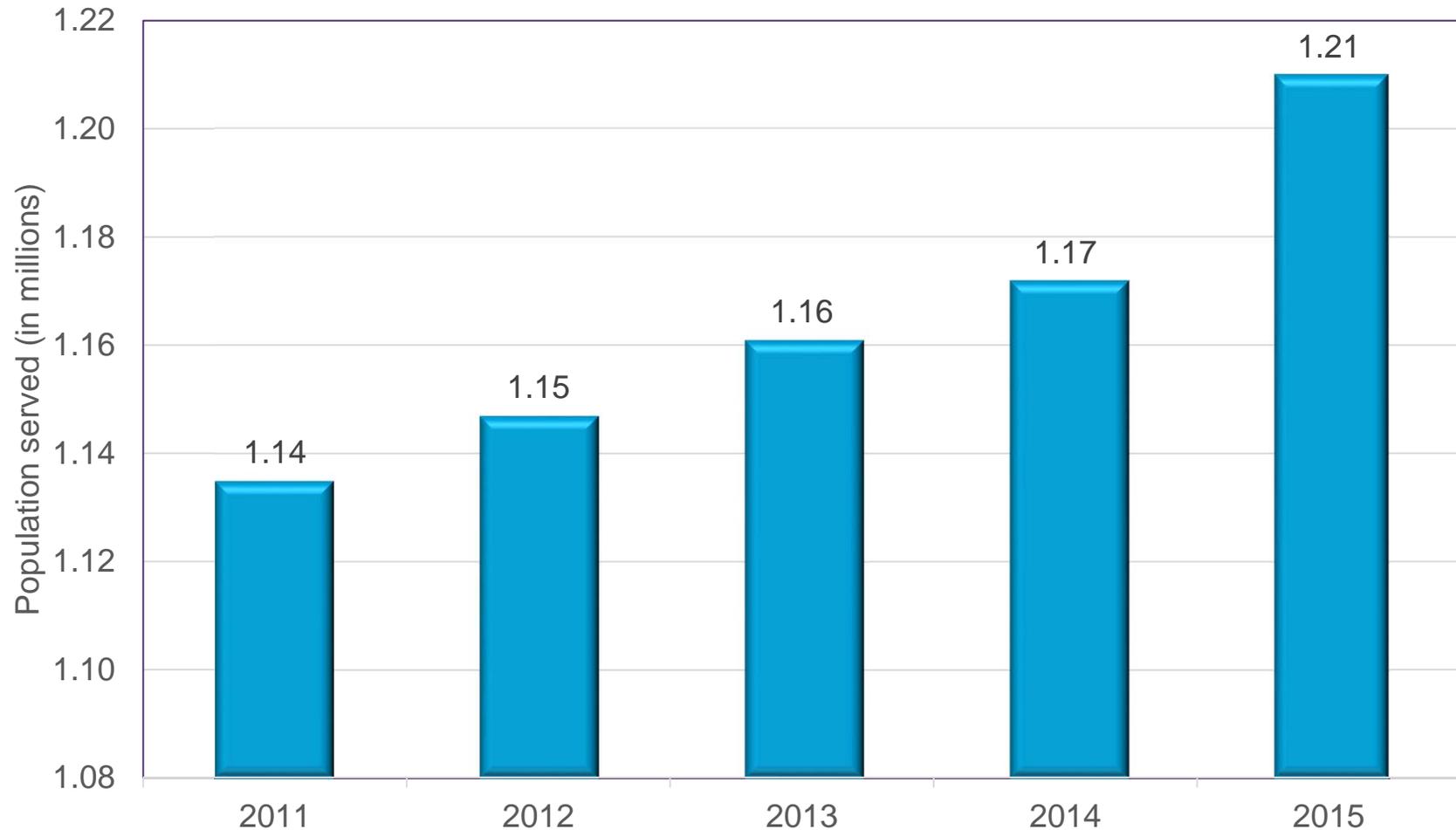
# Strong demographics

- Above Average Population Growth: Between 2005 and 2014, Denver's population increased by approximately 18.7% compared to 17.1% and 14.8% for Denver PMSA and Colorado respectively.
- Robust Income Levels: The per capita personal income for Denver was \$62,880 in 2014 which is 128.7% of the Colorado average and 136.6% of the national average.
- Low Unemployment: The unemployment rate in Denver and the Denver-Aurora MSA (3.1%) remains below the State of Colorado (3.3%) and the U.S. (5.0%).

**Denver ranked no. 1 on US News & World Report's list of the 2016 Best Places to Live**

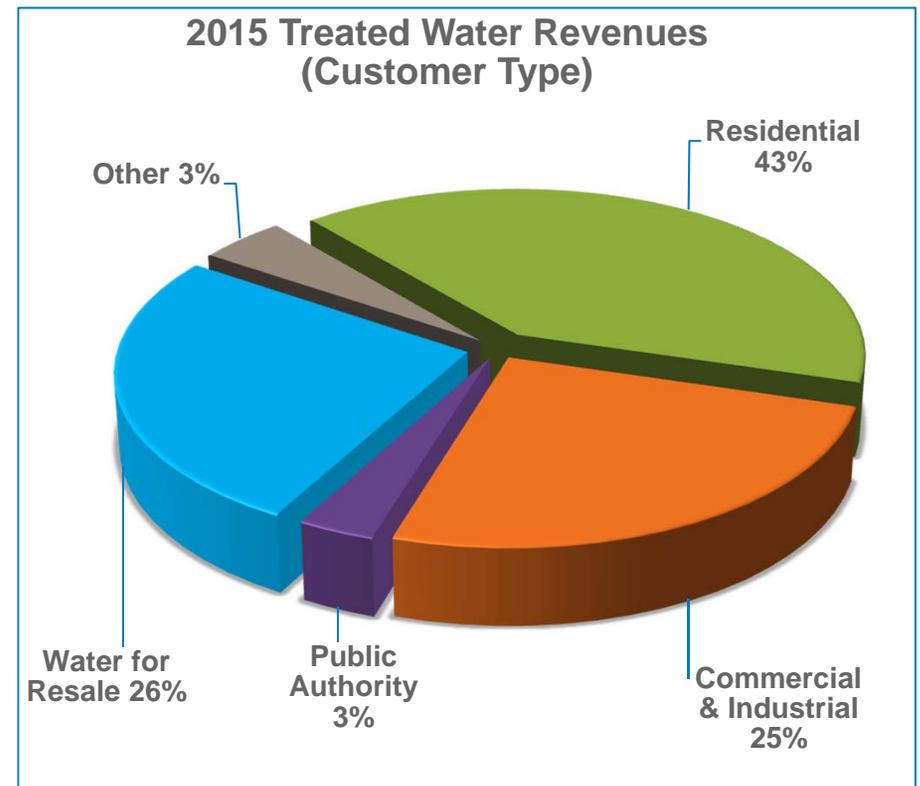
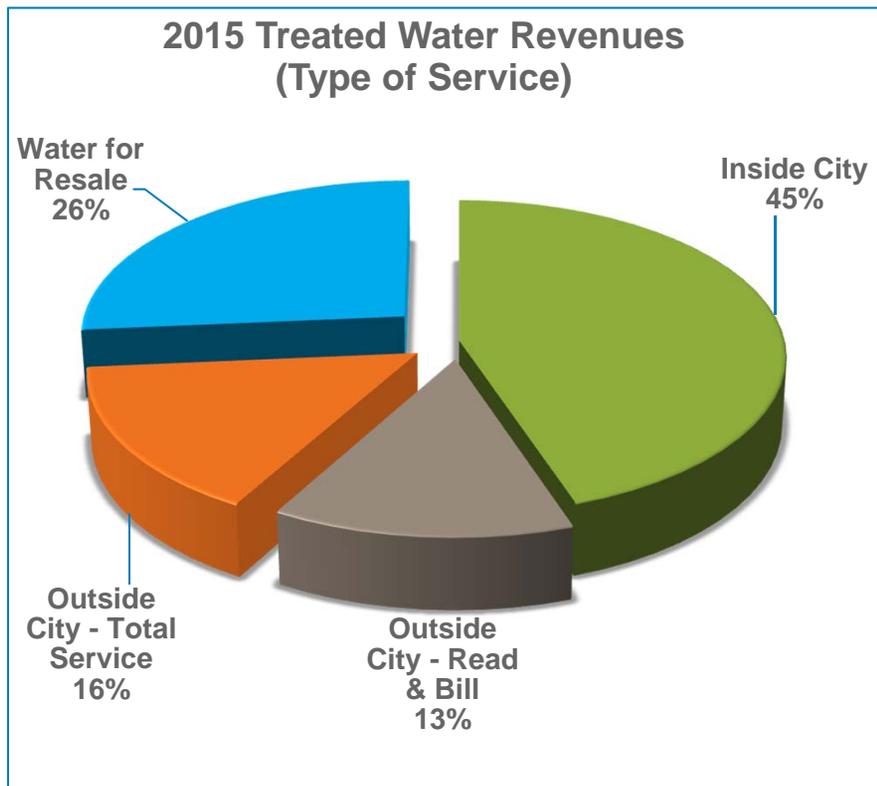
# Steadily growing customer base

Population estimate based on treated water customers only



# Customer diversity provides revenue stability

- Diversified by location, level of service and type of customer
- Top 10 retail customers in 2015, excluding City and County of Denver, comprised 4.55% of total consumption and 4.62% of total revenue



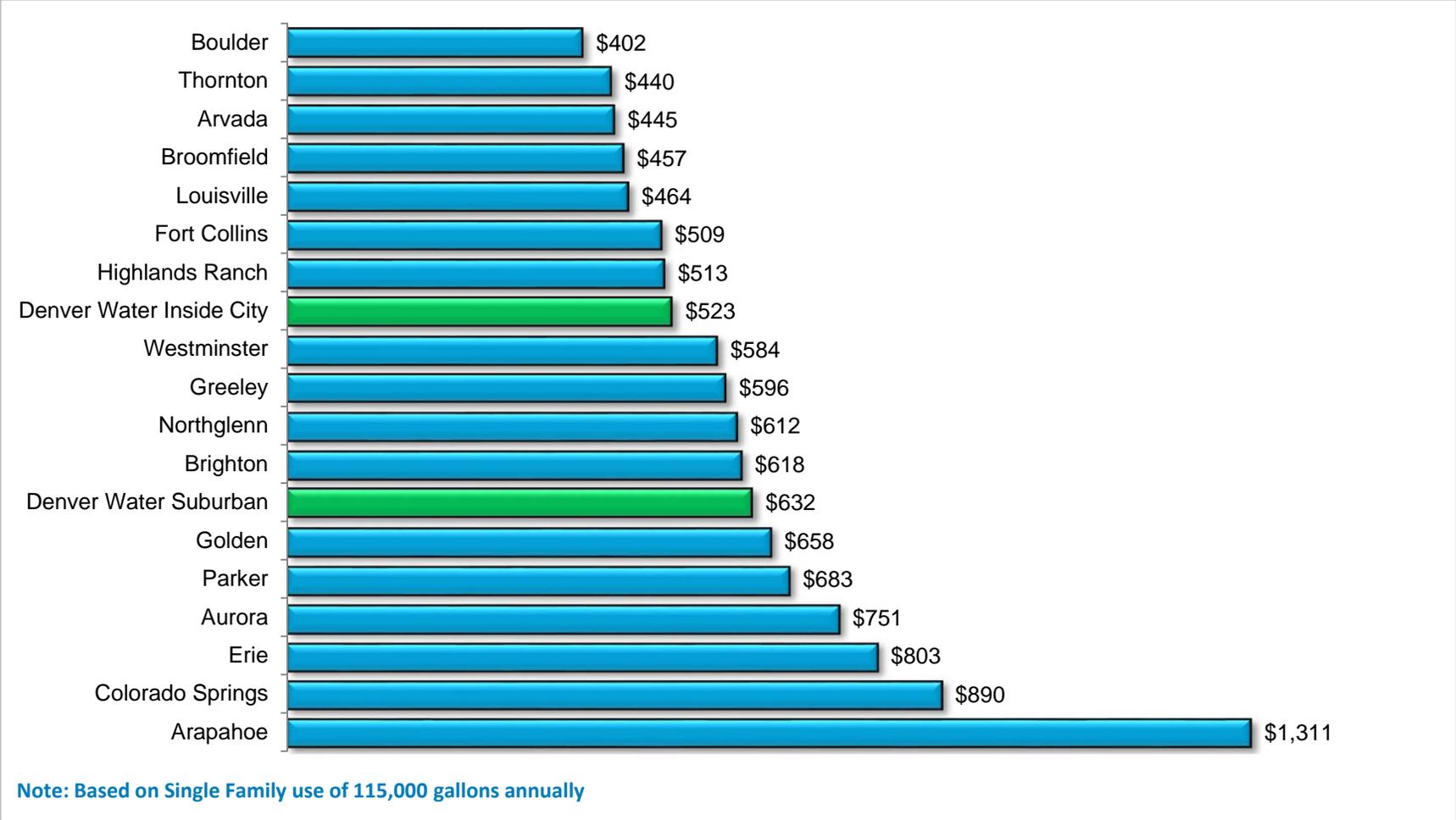
# Diverse area employment base provides resilience in various economic conditions

	% of Total City Employment
Denver Public School District #1	2.7%
City & County of Denver	2.8
State of Colorado Central Payroll	2.5
U.S.D.A. National Finance Center	1.6
Denver Health & Hospital Authority	1.0
United Airlines, Inc.	1.7
CHC Payroll Agent, Inc. (HCA Health One)	0.9
Frontier Airlines Inc.	1.0
University of Colorado Central	1.7
Accounting Service Center (U.S. Postal Svc.)	1.0
<b>Total</b>	<b>16.9%</b>

# SECTION 5: CUSTOMER RATES

# Competitive water rates

## Estimated annual residential water bills



# Typical monthly residential water bill

## Comparison of Typical Monthly Winter and Summer water bills<sup>1</sup>

### Based on 2016 Rates

Type of Service	Winter	Summer
Inside City	\$22.49	\$64.69
Outside City (Read & Bill)	23.54	68.99
Outside City (Total Service)	26.07	79.31

<sup>1</sup>Estimated water bills are based on 2016 rates and service charges effective April 2016. Winter is defined as the six-month period November through April, and summer is defined as the six-month period May through October.

The new rate structure, implemented in April 2016, is designed to increase the fixed fee portion of operating revenues to 20% over the next three years

# Proactively managed revenue increases

*Rates reviewed and adjusted annually based on long-range financial plan*

Water Rate Revenues Changes	
Effective Date	Increase in Revenues
2007	7.0%
2008	5.0%
2009	9.0%
2010	6.0%
2011	9.5%
2012	5.5%
2013	2.5%
2014	3.5%
2015	2.2%
2016	3.8%

# SECTION 6: FINANCIAL HIGHLIGHTS

# Conservative fiscal policies and guidelines provide good governance and controls

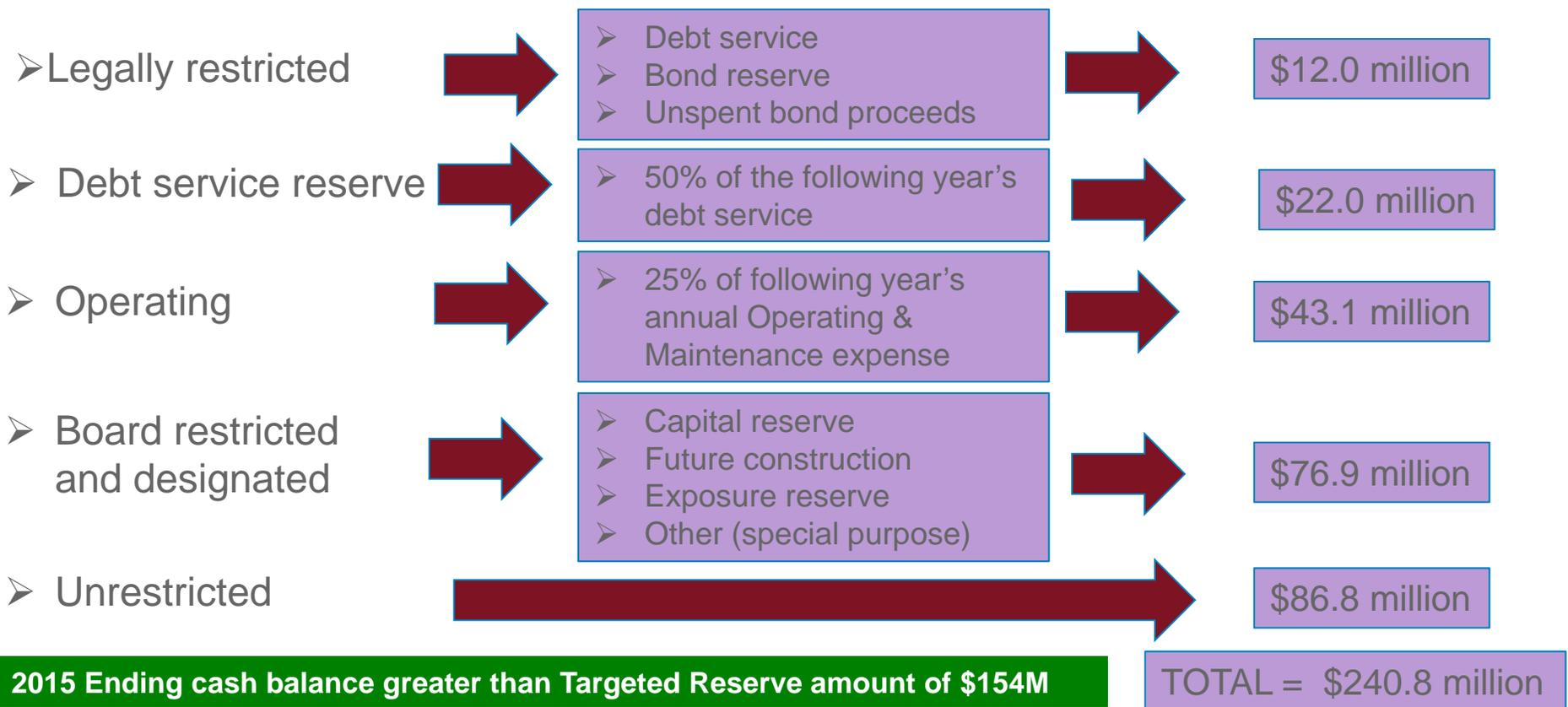
- Cash Reserve Policy: policy targets used as a basis for financial planning and annual budget
- Debt Policy
  - Debt Service Coverage: policy target range 1.8x to 2.0x
  - Leverage (Debt) ratio: not to exceed 40% leverage target in policy
- Post–Issuance Debt Compliance Policy
- Investment Policy
- Pension Funding Policy

# Commitment to maintain sufficient liquidity

*While Series 2016 A&B do not have a debt reserve fund Denver Water remains focused on maintaining targeted reserves and strong liquidity*

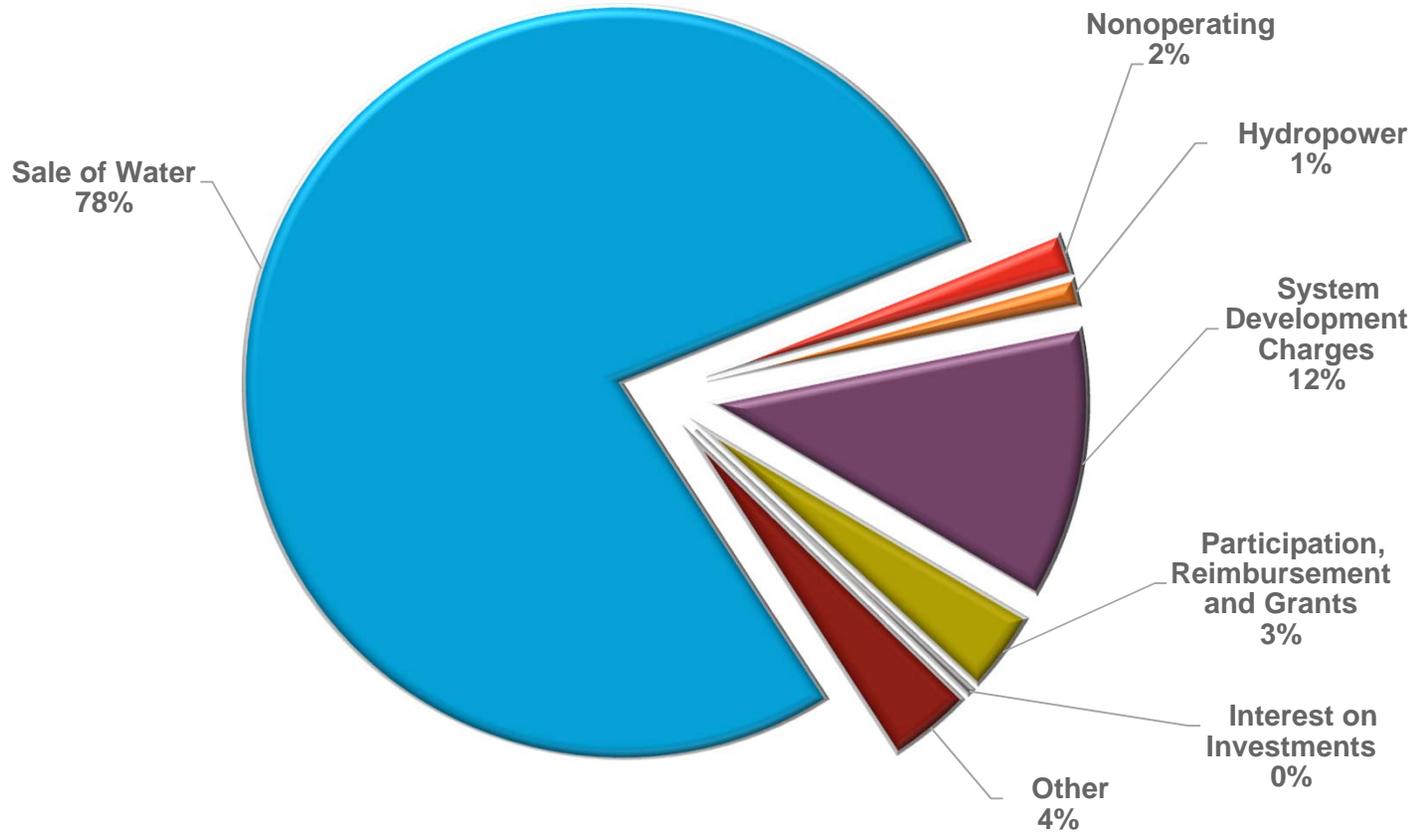
## Targeted Cash Reserves

## 2015 Actuals



# Diverse revenue sources

2015 Revenues by Source<sup>1</sup>



- System development charges fund part of expansion projects
- Hydropower sales provide natural hedge against rising energy costs

<sup>1</sup>Unaudited

# Strong financial results

(in Millions)	2011	2012	2013	2014	2015
Total Operating Revenues	\$250.7	\$284.3	\$242.6	\$250.7	\$252.0
Other Income	6.5	6.5	6.9	6.4	6.7
Interest Income	1.2	1.5	1.5	1.6	1.5
System Development Charges	14.2	19.5	34.5	32.7	36.1
Participation Fees (cash portion)	7.0	1.3	4.8	6.4	8.7
<b>Total Gross Revenues<sup>1,2</sup></b>	<b>279.7</b>	<b>313.1</b>	<b>290.3</b>	<b>297.8</b>	<b>305.1</b>
Total Operating Expenses	209.3	202.6	208.9	225.1	215.8
Other Expenses	4.4	2.2	2.9	2.3	2.5
Less: Depreciation and Amortization	50.6	48.2	47.8	47.8	49.8
Total Operating and Maintenance Expenses <sup>2</sup>	163.2	156.5	164.1	179.5	168.5
<b>Net Revenue<sup>2</sup></b>	<b>\$116.5</b>	<b>\$156.6</b>	<b>\$126.3</b>	<b>\$118.3</b>	<b>\$136.5</b>
<b>Debt Service Requirements</b>	<b>\$55.9</b>	<b>\$44.5</b>	<b>\$46.2</b>	<b>\$46.7</b>	<b>\$47.9</b>
<b>Coverage Ratios</b>	<b>2.08</b>	<b>3.52</b>	<b>2.73</b>	<b>2.53</b>	<b>2.85</b>

<sup>1</sup>Gross revenues include BABs subsidies

<sup>2</sup>Numbers may not add due to rounding

# Financial profile: 5-year outlook

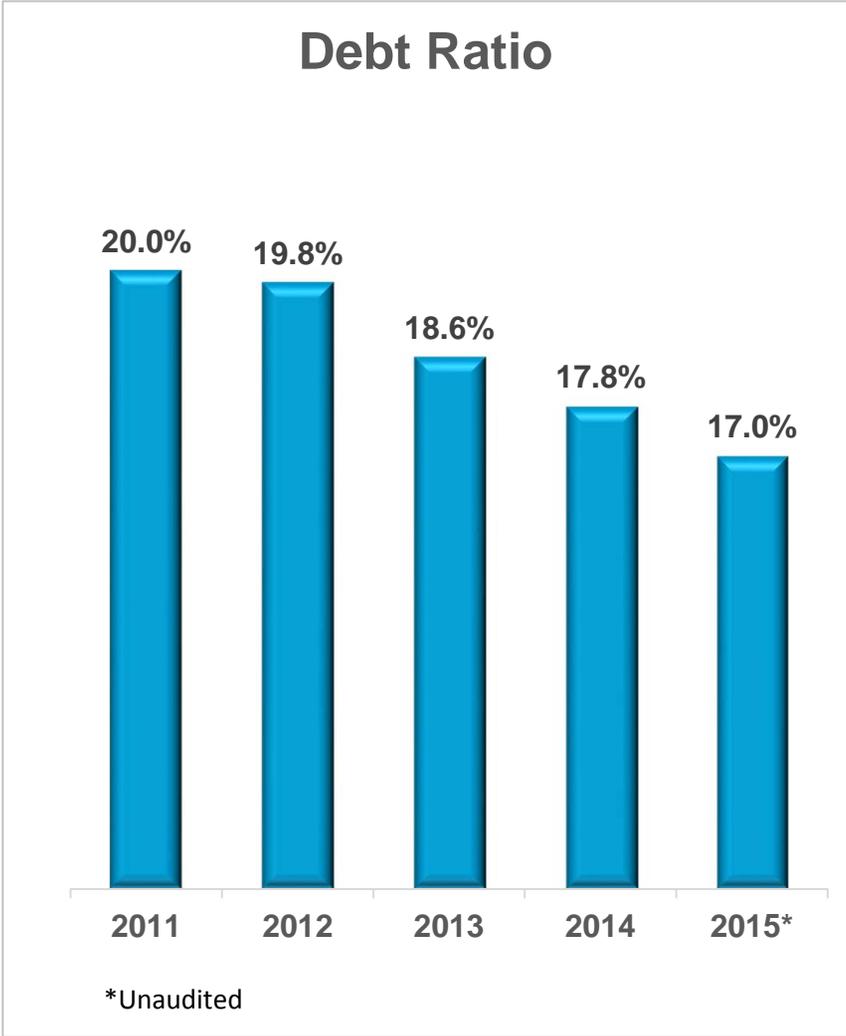
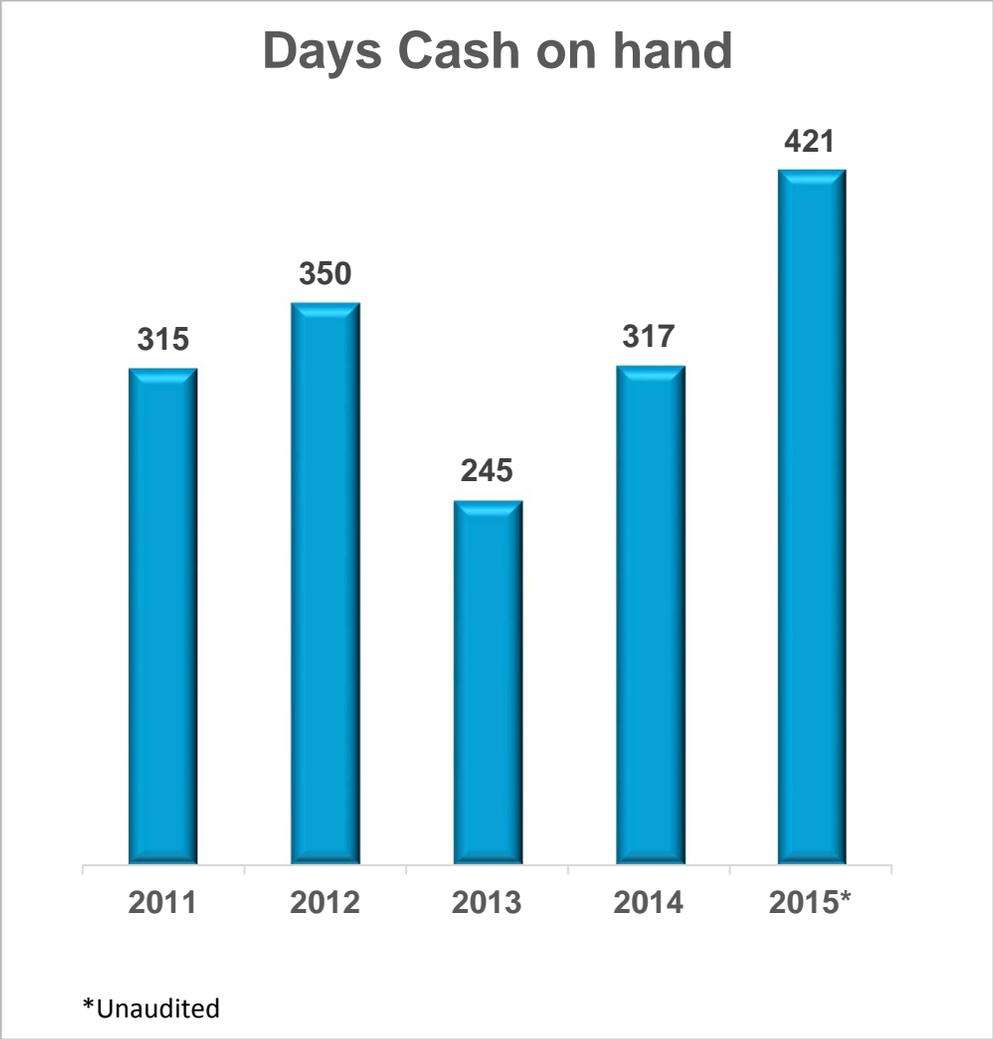
(in Millions)	2016 Budget	2017	2018	2019	2020
Projected Revenue Increase	3.8%	3.8%	3.8%	3.8%	3.8%
Total Operating Revenues	277.6	296.5	308.5	321.3	334.6
System Development Charges	20.3	23.7	27.1	27.1	26.8
All Other Revenue Sources	23.1	23.0	20.8	20.9	24.4
Bond Proceeds	56.9	113.8	163.4	139.5	129.4
<b>Total Sources of Funds<sup>2</sup></b>	<b>377.9</b>	<b>457.0</b>	<b>519.7</b>	<b>508.7</b>	<b>515.1</b>
Operations and Maintenance Expenses <sup>1</sup>	176.8	173.9	175.3	176.7	178.2
Capital Expenditures <sup>1</sup>	166.8	257.7	310.1	282.3	269.5
Total Debt Service	43.8	41.8	45.3	51.0	58.6
<b>Total Uses of Funds<sup>2</sup></b>	<b>387.4</b>	<b>473.4</b>	<b>530.6</b>	<b>510.0</b>	<b>506.3</b>
Gross Revenues <sup>3</sup>	\$321.0	\$343.2	\$356.3	\$369.2	\$385.7
<b>Less: Operations and Maintenance Expenses<sup>2</sup></b>	<b>\$176.8</b>	<b>\$173.9</b>	<b>\$175.3</b>	<b>\$176.7</b>	<b>\$178.2</b>
<b>Net Revenue</b>	<b>\$144.2</b>	<b>\$169.3</b>	<b>\$181.0</b>	<b>\$192.5</b>	<b>\$207.5</b>
<b>Debt Service Requirements</b>	<b>\$43.8</b>	<b>\$41.8</b>	<b>\$45.3</b>	<b>\$51.0</b>	<b>\$58.6</b>
<b>Coverage Ratios</b>	<b>3.29</b>	<b>4.05</b>	<b>4.00</b>	<b>3.77</b>	<b>3.54</b>

<sup>1</sup>Total Operating and Maintenance Expenses in the Board approved 2016 budget includes \$22.7 million in expenditures that will be capitalized. Accordingly, the 2016 Total Operation and Maintenance Expenses in this table have been adjusted downward by this amount.

<sup>2</sup>Numbers may not add due to rounding

<sup>3</sup>Gross revenues include BABs subsidies

# Liquidity & Debt ratios



# Long-term debt outstanding

The Board has approximately \$467 million in debt outstanding following the Series 2016A&B bond issues.

Debt Outstanding	Amount Outstanding (000)
Series 2007A*	20,110
Series 2008A	\$840
Series 2009A	\$44,000
Series 2010B	\$90,000
Series 2012A	\$36,555
Series 2012B	\$56,740
Series 2014A	\$48,670
Series 2016A*	\$100,000
Series 2016B*	\$70,000
<b>Total</b>	<b>\$466,915</b>

\* Preliminary, subject to change.

Note: Series 2007A non-callable & 2033 term maturities remain outstanding.

Lease Agreement: the Board has a capital lease agreement with the Colorado River Water Conservation District; remaining lease payment amount is \$13.5 million, including interest.

# SECTION 7: CURRENT FINANCING

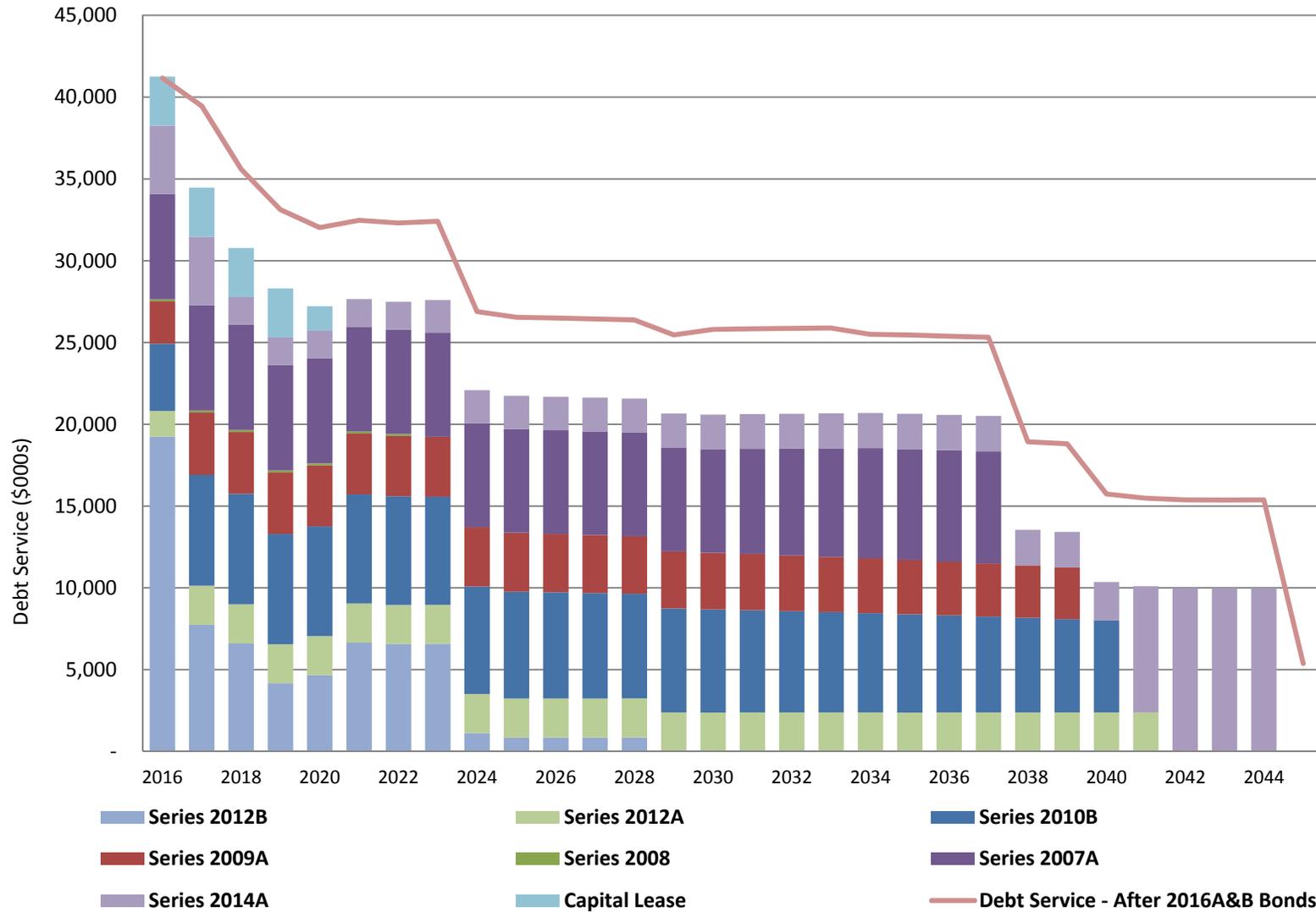
MASTER RESOLUTION WATER REVENUE & REFUNDING BONDS,  
SERIES 2016 A&B

# OVERVIEW OF BOND ISSUE – SERIES 2016 A&B

## Series 2016A&B New Money and Refinancing Bonds (Competitive Sale)

- Series 2016A New Money: A portion of the net proceeds of the Series 2016A Bonds are to be used to fund various Capital Improvements to the System
  - Par Amount: \$100 million
  - Final maturity: September 15, 2045
  - Structured for level annual debt service
- Series 2016B Refunding Project: advance refund callable Series 2007A bonds for economic savings
  - Par Amount: \$70 million
  - Final maturity: 2037 (same term as 2007A bonds)
  - Structured for annual savings
  - Present value savings greater than 13% of refunded par
  - Term bond in 2033 remains unrefunded

# Debt profile: Total Annual Debt Service



# SECTION 8: SUMMARY

# Summary

- Stable and economically diverse service area includes broader Denver metropolitan area
- Expanding mass transit and airport to support steadily increasing population and migrating businesses
- Financial planning practices and robust policies ensure strong and stable financial health
- Current debt structure allows for adequate capacity to finance future capital projects while maintaining reasonable rate increases
- Long-range planning includes preparation for weather variability
- Capital improvement plan with sizeable, cash-funded component
- Geographically diverse system provides reliability and adequate operational redundancies
- Strong leadership focused on entire Western region cooperative solutions

# Timeline

Apr-16						
Su	M	Tu	W	Th	F	Sa
						1 2
	3	4	5	6	7	8 9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May-16						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6 7
	8	9	10	11	12	13 14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Date	Event
April 15 & 18, 2016	Rating calls
April 27, 2016	Receive ratings
April 29, 2016	Post POS
May 10, 2016	Bond sale
May 24, 2016	Bond closing

# Questions and contact

Please direct follow up question to:

**Usha Sharma**

**Treasurer**

**303-628-6410**

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